

S.N. 10/019,330
Art Unit: 2143

REMARKS

Claims 1-22 are pending.

In the outstanding final Office Action, the Examiner (1) rejected claims 1-22 under 35 U.S.C. §103(a) over a combination of Bayeh (U.S. Patent No. 6,098,093) and Freund et al., U.S. Patent No. 5,925,098; (2) asserted that certain claim limitations that the Examiner considered as being "well known" are now established as admitted prior art of record for the course of prosecution.

Rejections in (1)

Claims 1, 18, 21, and 22 are independent claims, and each of these independent claims recites similar subject matter. Claim 1 is chosen for the following argument as being representative. Claim 1 recites the following:

A method of managing a plurality of sessions, the sessions being between a plurality of terminals and a server having a plurality of threads, the method comprising:

grouping the sessions into a plurality of groups; and

assigning a thread to each group of sessions so that the assigned thread only handles the events of that group of sessions.

It is respectfully submitted that none of the cited art includes the unique features of independent claim 1 and in particular the subject matter of "assigning a thread to each group of sessions so that the assigned thread only handles the events of that group of sessions." It is noted that a thread is assigned to each group of *sessions*, which means that the groups correspond to multiple sessions in the subject matter of "assigning a thread to each group of sessions so that the assigned thread only handles the events of that group of sessions".

With regard to the rejections in (1), Bayeh is directed to spreading requests among a number of servlets/web servers. In Bayeh, the requests are passed through a load balancing host 59, which sends the requests to web servers 60, 62, and 64. The load

S.N. J0/019,330
Art Unit: 2143

balancing host 59 sends requests to a "server selected according to policies implemented in the load-balancing host software." Bayeh, col. 8, lines 42-58. It is believed that the "policies" are based on load of the web server and requests are sent to a web server based on load. The load balancing host 59 is not disclosed or implied as being one that would "group" the requests based on session. In fact, Bayeh appears to disclose that the load balancing host 59 acts only on requests and it is immaterial for purposes of balancing load as to which session it is that a request is related.

Because requests are spread among a number of servlets such that any servlet can handle requests from any session, more than one servlet might be able to access — at the same time — session information for a particular session. Bayeh discloses techniques for ensuring that only one servlet can access session information at any time for a particular session while requests can still be directed to any servlet. See, e.g., FIGS. 3, 4A, and 4B of Bayeh, and in particular steps 410-480.

In Bayeh therefore, there is no concerted effort or implication of grouping sessions into groups and assigning a thread to each group of sessions. Consequently, there is no disclosure or implication in Bayeh of "grouping the sessions into a plurality of groups" or "assigning a thread to each group of sessions so that the assigned thread only handles the events of that group of sessions" as recited in claim 1.

Freund also does not disclose or imply the recited subject matter from independent claim 1. Instead, what Freund appears to disclose is a system for ensuring that all related requests (e.g., related through a specific transaction) are sent to the same thread. See, e.g., the following section of Freund:

A first embodiment of the server architecture (FIG. 2) involves the placing of a group 21 of FIFO queues 21a-21n with one request queue assigned to each execution thread 22a-22n in a one-to-one relationship. According to this embodiment, when client requests are received by the server's Object Adapter 23 over the Object Request Broker 24 from a client computer system, the Object Adapter 23 examines the contents of each request contained on its received request FIFO buffer 23a. Based on such contents the

S.N. 10/019,330
Art Unit: 2143

requests can then be forwarded on to the appropriate request queue 21a-21n. For example, if a first received client request relates to a particular transaction and a second received client request relates to a different transaction, the first request can be assigned to queue 21a (and its corresponding execution thread 22a) and the second request can be assigned to queue 21b (and its corresponding execution thread 22b). Then, if a third received transaction request relates to the same transaction as the first request, the object adapter 23 would recognize this and assign this third request to the queue 21a to be processed by execution thread 22a.

In this way, *a complete transaction* consisting of many separate (but related) requests can be executed *by the same execution thread*, thus providing the same execution environment for each transactionally related request.

Freund col. 5, lines 3-27 (emphasis added).

Freund describes a transaction as the following: "A transaction defines a single unit of work that must either be fully completed or fully purged without action". Freund, col. 3, lines 11-12. Freund also states the following: "According to these various embodiments, a scheduling mechanism ... ensures that all requests that are related (e.g. part of the same transaction) are sent to the same execution thread for processing." Freund, col. 6, lines 39-43. The Examiner's arguments imply that a "transaction" in Freud is equivalent to a "session" in Applicants' claims (which Applicants' do not admit).

There is no teaching or implication in Freud that multiple "transactions" are assigned to a single thread. In fact, it appears in Freud that a single thread is assigned to a single transaction:

According to these various embodiments, a scheduling mechanism (which does not necessarily have to be located in the Object Adapter) *ensures that all requests that are related* (e.g. part of the same transaction) *are sent to the same execution thread for processing*. This ensures consistency during the processing of an entire set of related requests. That is, the client machine issuing a sequence of transactionally related requests of the server machine can expect to get the same answer back when it issues the same sequence of requests at a later time. The processing conditions of the server's execution environment will stay the same because of the scheduling mechanism. That is, *intermediate requests belonging to another*

S.N. 10/019,330
Art Unit: 2143

transaction (or not related to a transaction at all) are not allowed to be processed by the execution thread currently processing a transaction. If such intermediate requests were allowed to be processed on a transaction's execution thread, the execution environment would be different when later parts of the transaction are processed by the thread and consistent results to report back to the client would not be guaranteed.

In order to determine whether a request belongs to a transaction, and the specifics of the transaction if it does, the Object Request Broker (ORB) 24 interrogates the transaction context of each incoming request. The transaction context of a request is obtained by the ORB by using the OMG-established Object Transaction Service (OTS) [OMG document 94.8.4 published in 1994]. The ORB also interrogates the Object Reference and any Service Contexts of the request to determine the specific server object (and thus server application) which the request is wishing to invoke. Once the transaction context and server context/application are determined, the ORB sends the request to the appropriate Object Adapter's queue. From there, the scheduling mechanism, as described in the above embodiments, ensures that all transactionally related requests are sent to the same execution thread. Also, *the scheduling mechanism can isolate the execution thread for a particular transaction by not allowing requests unrelated to that transaction from being processed on the transaction's assigned execution thread.*

Freund, col. 6, line 39 to col. 7, line 10 6-10 (emphases added). Consequently, Freund discloses that a single thread is assigned to a single "transaction" and there is no disclosure or implication that transactions are grouped and that a thread is assigned to a group of transactions.

Therefore, Freund does not disclose or imply "grouping the sessions into a plurality of groups" or "assigning a thread to each group of sessions so that the assigned thread only handles the events of that group of sessions" as recited in claim 1.

Because neither Bayeh nor Freud alone discloses "grouping the sessions into a plurality of groups" or "assigning a thread to each group of sessions so that the assigned thread only handles the events of that group of sessions", the combination of Bayeh and Freund does not disclose this subject matter.

S.N. 10/019,330
Art Unit: 2143

For at least these reasons, none of Bayeh, Freund, or their combination discloses or implies the subject matter from claim 1 of "grouping the sessions into a plurality of groups" or "assigning a thread to each group of sessions so that the assigned thread only handles the events of that group of sessions".

Furthermore, there does not appear to be motivation for combination of Bayeh with Freund, as Bayeh specifically allows requests from a single session to be spread amongst a number of servlets and therefore provides a mechanism for allowing multiple servlets to access session information from a single session. By contrast, the system in Freund appears to send all requests from a single transaction to a single thread. Therefore, the system of Freund would not need the mechanism of Bayeh, as only a single thread in Freund would handle requests from a single transaction. In Freund, multiple threads would *not* attempt to access session information from a single transaction, whereas allowing multiple threads to access session information for a single session is the main idea in Bayeh.

Therefore, there is no motivation to combine Bayeh and Freund and the combination of Bayeh and Freund is invalid. Because the combination is invalid, even if Bayeh and Freund disclose all elements in independent claim 1 (which Applicants submit are not disclosed by a combination of Bayeh and Freund), the rejection under §103 is improper because a *prima facie* case of obviousness has not been met.

However, the Examiner asserts the following:

By utilizing the queue assignment techniques of Freund to assign sessions to particular web servers, servlets and threads, the system of Bayeh is enhanced by allowing each session to be executed in the same environment as before, resulting in reduced overhead processing for the servers.

Outstanding final Office Action, page 9, section 21. Even if the above assertion were true (which Applicants do not admit), the combination of Bayeh and Freund still would not disclose the subject matter of "grouping the sessions into a plurality of groups" or "assigning

S.N. 10/019,330
Art Unit: 2143

a thread to each group of sessions so that the assigned thread only handles the events of that group of sessions", as neither reference singly discloses this subject matter.

Moreover (as stated above), if the queue assignment techniques of Freund were utilized to assign sessions to particular web servers in Bayeh, it appears this would render the invention in Bayeh superfluous or inoperable. As described above, Bayeh is directed to techniques for ensuring that only one servlet can access session information at any time for a particular session while requests can still be directed to any servlet. See, e.g., FIGS. 3, 4A, and 4B of Bayeh, and in particular steps 410-480. By contrast, the queue assignment techniques of Freund "distribut[e] client requests stored in said buffer to said plurality of execution threads in a manner such that related client requests are sent to the same execution thread". Freund, Abstract. Therefore, in Freund, no mechanism is necessary for ensuring that only one thread can access transaction information at any time for a particular transaction because only one thread will access transaction information at any particular time for a particular transaction. The invention in Bayeh, which allows multiple servlets to access the same session information, would be rendered superfluous or inoperable by the combination of Bayeh and Freund.

For at least these reasons, the combination of Bayeh and Freund is invalid and a prima facie case of obviousness has not been made.

With regard to independent claims 18, 21, and 22, each of these claims recites subject matter similar to the subject matter in independent claim 1. In particular, independent claim 18 recites "A server for managing a plurality of sessions with a plurality of terminals, the server comprising a plurality of threads, grouping means to group the sessions into a plurality of groups, and assigning means to assign a thread to each group of sessions so that the assigned thread only handles the events of that group of sessions"; independent claim 21 recites "A communications system comprising a server and a plurality of terminals, the server and the terminals conducting a plurality of sessions, the server comprising a plurality of threads, grouping means to group the sessions into a plurality of groups and assigning means to assign at least one thread to each group of sessions so that the assigned thread only handles the

S.N. 10/019,330
Art Unit: 2143

events of that group of sessions"; and independent claim 22 recites "A computer program product for managing a plurality of sessions, the sessions being between a plurality of terminals and a server having a plurality of threads, comprising: computer readable program means for grouping the sessions into a plurality of groups; and computer readable program means for assigning a thread to each group of sessions so that the assigned thread only handles the events of that group of sessions".

Therefore, each of independent claims 1, 18, 21, and 22 is patentable over the (improper) combination of Bayeh and Freund.

The dependent claims are all allowable at least by virtue of their dependency from allowable independent claims. Thus, the individual merits of the dependent claims need not be discussed at this juncture.

Assertion in (2)

The Examiner stated the following:

Applicant has failed to seasonably challenge the Examiner's assertions of well known subject matter in the previous Office action(s) pursuant to the requirements set forth under MPEP §2144.03. A "seasonable challenge" is an explicit demand for evidence set forth by Applicant in the next response. Accordingly, the claim limitations the Examiner considered as "well known" in the first Office action are now established as admitted prior art of record for the course of the prosecution. See *In re Chevenard*, 139 F.2d 71, 60 USPQ 239 (CCPA 1943).

Applicants respectfully disagree for at least the following reasons.

The Examiner asserts that "the claim limitations the Examiner considered as 'well known' in the first Office action are now established as admitted prior art of record *for the course of the prosecution*". M.P.E.P. §2144.03 states the following:

If applicant does not traverse the examiner's assertion of official notice or applicant's traverse is not adequate, the examiner should clearly indicate in the next Office action that the common knowledge or well-

S.N. 10/019,330
Art Unit: 2143

known in the art statement is taken to be admitted prior art because applicant either failed to traverse the examiner's assertion of official notice or that the traverse was inadequate. If the traverse was inadequate, the examiner should include an explanation as to why it was inadequate.

M.P.E.P. §2144.03 (Rev. 3, Aug. 2005). Although the M.P.E.P. indicates that the "well-known in the art statement is taken to be admitted prior art", the M.P.E.P. does not have the force of law or rule: "The Manual *does not have the force of law* or the force of the rules in Title 37 of the Code of Federal Regulations." M.P.E.P., the section entitled "Forward" (Rev. 3, Aug. 2005). Applicants can find no case law, statute, or rule indicating that an initial failure to respond to a statement of Official Notice means that the statement of Official Notice is valid for time immemorial (i.e., the course of the prosecution, as asserted by the Examiner). Consequently, Applicants will challenge each of these Official Notice statements as described below.

In particular, the Examiner uses terminology similar to the following (where "A" is some concept): "By this rationale, 'Official Notice' is taken that *both the concept(s) and advantages* of providing for A are well known" or "By this rationale, 'Official Notice' is taken that *both the concept(s) and advantages of providing for A* are well known and expected in the art." For instance, the Examiner asserts the following: "By this rationale, 'Official Notice' that both the *concepts and advantages of providing for* sessions which remain open until closed is well known in the art" (page 7 of the final Office Action) (emphasis added); or "By this rationale, 'Official Notice' is taken that both the *concept and advantages of providing for* static load balancing techniques are well known and expected in the art" (page 4 of the final Office Action) (emphasis added).

Applicants respectfully submit that this terminology is unclear, as the metes and bounds of these statements simply cannot be determined. As an example, consider the statement of "By this rationale, 'Official Notice' is taken that it is well known that *the sky is blue*", where *the sky is blue* is the asserted concept "A". This statement is clear, as Applicants can determine whether the sky is or is not blue. Now consider the statement of "By this rationale, 'Official Notice' is taken that both the concept(s) and advantages of providing for a

S.N. 10/019,330
Art Unit: 2143

blue sky are well known". With the latter statement, it is unclear as to what concepts and advantages are being relied upon in the statement that "the concepts and advantages of providing for *a blue sky* are well known".

Furthermore, the phrase "concept(s) and advantages" appears to modify "providing" and not "*a blue sky*". In other words, the statement could be "By this rationale, 'Official Notice' is taken that both the concept[s] and advantages of *a blue sky* are well known"; instead, the statement is "By this rationale, 'Official Notice' is taken that both the concept(s) and advantages of providing for a blue sky are well known". It is unclear as to what the phrase "providing for" means in this context and how this phrase relates to the asserted concept (in this example, *a blue sky*) and therefore to some asserted fact. For instance, is the asserted fact that one is providing for a blue sky or is the asserted fact the blue sky itself (or both providing for a blue sky and the blue sky itself)?

Turning to an exemplary statement of Official Notice made by the Examiner, the Examiner asserts the following: "By this rationale, 'Official Notice' is taken that both the *concept and advantages of providing for* static load balancing techniques are well known and expected in the art" (page 4 of the final Office Action) (emphasis added). Applicants cannot determine the metes and bounds of this statement. What are the concept and advantages being relied upon? Further, what is asserted to be well known: the providing for static load balancing techniques, or the static load balancing techniques themselves (or both)?

For at least these reasons, Applicants contest each one of the following assertions:

"By this rationale, 'Official Notice' is taken that both the *concept and advantages of providing for* static load balancing techniques are well known and expected in the art" (page 4 of the final Office Action, in a rejection corresponding to claim 5).

"By this rationale, 'Official Notice' is taken that both the *concept and advantages of providing for* relative load balancing techniques are well known and expected in the art" (page 5 of the final Office Action, in a rejection corresponding to claim 7).

S.N. 10/019,330
Art Unit: 2143

"By this rationale, 'Official Notice' is taken that both the concept and advantages of providing for random load balancing techniques are well known and expected in the art" (page 6 of the final Office Action, in a rejection corresponding to claim 8).

"By this rationale, 'Official Notice' that both the concepts and advantages of providing for sessions which remain open until closed is well known in the art" (page 7 of the final Office Action, in a rejection corresponding to claim 12).

"By this rationale, 'Official Notice' that both the concepts and advantages of providing for cellular telephones and mobile terminals as the terminals is well known and expected in the art" (page 7 of the final Office Action, in a rejection corresponding to claims 13 and 14).

"By this rationale, 'Official Notice' is taken that both the concept and advantages of providing for using the WSP protocol for sessions is well known and expected in the art" (page 8 of the final Office Action, in a rejection corresponding to claim 17).

The Examiner asserts that "*the claim limitations* the Examiner considered as 'well known' in the first Office action are now established as admitted prior art of record". Assuming, *arguendo*, that there is material that is now established as admitted prior art of record (which Applicants do not admit), Applicants respectfully submit that this material is limited to the Examiner's factual statements of Official Notice and does not necessarily affect the claim limitations. For instance, even if the Examiner's asserted Official Notice statements are taken as being true (which Applicants do not admit), the dependent claims are still patentable in the context of the subject matter of independent claims along with the subject matter of the dependent claims, as is shown below.

Regarding claim 5, assume for sake of argument that the following statement is true (which Applicants do not admit): "By this rationale, 'Official Notice' is taken that ... static load balancing techniques are well known and expected in the art" (page 4 of the final Office Action). This statement is used in a rejection of claim 5, which recites "A method according to claim 1 in which sessions are assigned statically to particular threads." While load balancing could be used with the disclosed invention, there is no mention of load balancing in claim 5. In other words, claim 5 does not recite that sessions are assigned

S.N. 10/019,330
Art Unit: 2143

statically to particular threads *in order to balance load between the particular threads*, which is what the Examiner appears to argue. Therefore, claim 5 is patentable even if "load balancing techniques are well known and expected in the art".

Regarding claim 5 in conjunction with claim 1, claim 1 recites in part "grouping the sessions into a plurality of groups" and "assigning a thread to each group of sessions so that the assigned thread only handles the events of that group of sessions". Even if the statement of "By this rationale, 'Official Notice' is taken that ... static load balancing techniques are well known and expected in the art" is taken as true (which Applicants do not admit), it is not known or expected to statically assign sessions to particular threads, where a thread is assigned to each group of sessions so that the assigned thread only handles the events of that group of sessions. Certainly Bayeh does not disclose or imply as such, as Bayeh performs load balancing of requests to web servers based on "policies implemented in load-balancing host software" (see col. 8, lines 49-58), and there is no disclosure or implication of static assignment of sessions to particular threads, where a thread is assigned to each group of sessions so that the assigned thread only handles the events of that group of sessions. Freund appears unrelated to static assignment of sessions to particular threads. The Examiner asserts that one could modify Bayeh to include static load balancing techniques, but even if one could modify Bayeh to include static load balancing techniques, those techniques would be related to static load balancing of requests to web servers and not related to static assignment of sessions to particular threads, where a thread is assigned to each group of sessions so that the assigned thread only handles the events of that group of sessions, as recited generally in claims 5 and 1. Therefore, claim 5 is patentable over the combination of Bayeh, Freund, and the Examiner's Official Notice.

Regarding claim 7, this claim recites "A method according to claim 6 in which the second group is chosen on the basis of the relative levels of activity of the groups". Claim 6 recites "A method according to claim 1 in which a session is put into a first group in a first time period before suspension and put into a second group in a second time period following resumption". Claim 1 recites in part "grouping the sessions into a plurality of groups" and

S.N. 10/019,330
Art Unit: 2143

"assigning a thread to each group of sessions so that the assigned thread only handles the events of that group of sessions". Even if the statement of "By this rationale, 'Official Notice' is taken that ... relative load balancing techniques are well known and expected in the art" is true (which Applicants do not admit), claim 7 is still patentable, it is not known or expected to choose a second group on the basis of the relative levels of activity of the groups, where a session is put into a first group in a first time period before suspension and put into a second group in a second time period following resumption, and where a thread is assigned to each group of sessions so that the assigned thread only handles the events of that group of sessions. The Examiner asserts that one could modify Bayeh to include [relative] load balancing techniques (note that the Examiner only says that one could modify Bayeh to include "load balancing techniques", but it appears that the term "relative load balancing techniques" is implied). Even if one could modify Bayeh to include relative load balancing techniques, those techniques would be related to relative load balancing of requests to web servers and not to choosing a second group on the basis of the relative levels of activity of the groups, where a session is put into a first group in a first time period before suspension and put into a second group in a second time period following resumption, and where a thread is assigned to each group of sessions so that the assigned thread only handles the events of that group of sessions, as recited generally in claims 7, 6, and 1. Therefore, claim 7 is patentable over the combination of Bayeh, Freund, and the Examiner's Official Notice.

Regarding claim 8, this claim recites "A method according to claim 6 in which the second group is chosen randomly". Claim 6 recites "A method according to claim 1 in which a session is put into a first group in a first time period before suspension and put into a second group in a second time period following resumption". Claim 1 recites in part "grouping the sessions into a plurality of groups" and "assigning a thread to each group of sessions so that the assigned thread only handles the events of that group of sessions". Even if the statement of "By this rationale, 'Official Notice' is taken that ... random load balancing techniques are well known and expected in the art" is true (which Applicants do not admit), claim 8 is still patentable, it is not known or expected to choose a second group randomly, where a session is put into a first group in a first time period before suspension and put into a

S.N. 10/019,330
Art Unit: 2143

second group in a second time period following resumption, and where a thread is assigned to each group of sessions so that the assigned thread only handles the events of that group of sessions. The Examiner asserts that one could modify Bayeh to include random load balancing techniques. Even if one could modify Bayeh to include random load balancing techniques, those techniques would be related to random load balancing of requests to web servers and not to choosing a second group on the basis of the relative levels of activity of the groups, where a session is put into a first group in a first time period before suspension and put into a second group in a second time period following resumption, and where a thread is assigned to each group of sessions so that the assigned thread only handles the events of that group of sessions, as recited generally in claims 8, 6, and 1. Therefore, claim 8 is patentable over the combination of Bayeh, Freund, and the Examiner's Official Notice.

Regarding claim 12, this claim recites "A method according to claim 1 in which the sessions remain open for an undetermined period of time until closed". Claim 1 recites in part "grouping the sessions into a plurality of groups" and "assigning a thread to each group of sessions so that the assigned thread only handles the events of that group of sessions". It is noted that originally filed claim 12 referred to a "long-lived" session. Even if the statement "By this rationale, 'Official Notice' that ... sessions which remain open until closed is well known in the art" (page 7 of the final Office Action, in a rejection corresponding to claim 12), Applicants respectfully submit that the subject matter of claim 12 in conjunction with the subject matter of claim 1 is patentable. Applicants state the following:

In a communication system comprising a gateway server and a plurality of mobile terminals, establishing a session requires a relatively large amount of bandwidth because a terminal and a server must negotiate many characteristics relevant to the session. Furthermore, information which is unique to a particular opened session may be lost if the session is terminated. This unique information could have been negotiated as a result of transactions. For example, it may be the status of a game. In order to avoid opening and closing sessions on demand and establishing new sessions whenever they are needed, the sessions may be kept open for a long time, even in an inactive state, so that they can be resumed when needed. A session can remain open for

S.N. 10/019,330
Art Unit: 2143

days or even weeks until it is closed or until the terminal no longer receives power, for example from a battery. The state of a session can be preserved and kept alive even after switching the terminal off.

In this case, the session state can be saved to persistent memory or a SIM card before turning the power off. Of course, although the session is still alive, is not active afterwards. As a consequence, a gateway server serving a large number of mobile terminals needs to be able to manage a very large number of sessions indeed. The gateway may serve tens of thousands of mobile terminals or even in the region of a million mobile terminals. Generally a mobile will have one session open at one time (although there may be more), and so there can be in the region of one million sessions open at one time on the server.

An application in the server will use the operating system thread management service and create a number of threads to manage these sessions. However, a gateway server has difficulty dealing with such a large number of sessions. The number of event sources is much larger than the number of threads. Since most of the sessions are inactive, only a fraction of them have events at any particular time. Therefore assigning one thread to each session is an inefficient use of system resources. On the other hand, having only one thread to handle all events of all sessions is also inefficient because the thread may not process the events more quickly than they are generated in the protocol stack.

Applicants' Application, page 5, line 7 to page 6, line 19.

Therefore, it can be seen that Applicants determined that terminals (such as mobile terminal) that create sessions that are kept open for a long, undetermined period of time (e.g., the sessions are long-lived) create problems. For instance, a typical session between a client such as a personal computer and a server will be kept open for a short, determinable time period (e.g., if the client fails to respond within a certain time, the session can timeout and be closed; the sessions are, e.g., short-lived). Meanwhile, it was the Applicants who determined the following: "The number of event sources is much larger than the number of threads. Since most of the sessions are inactive, only a fraction of them have events at any particular time. Therefore assigning one thread to each session is an inefficient use of system resources. On the other hand, having only one thread to handle all events of all

S.N. 10/019,330
Art Unit: 2143

sessions is also inefficient because the thread may not process the events more quickly than they are generated in the protocol stack." Id.

Applicants also state the following:

According to a first aspect of the invention there is provided a method of managing a plurality of sessions the sessions being between a plurality of terminals and a server having a plurality of threads, the method comprising: grouping the sessions into a plurality of groups; and assigning a thread to each group of sessions.

The invention is able to optimise the load of the system handling the communication by reducing the number of threads needed to process the various sessions. It can also enable spreading the load of sessions across the threads. As a result, a huge numbers of sessions can be dealt with.

Applicant's Application, page 6, lines 21-30.

Therefore, even if sessions which remain open until closed is well known in the art, claim 12 is directed to sessions that remain open for an *undetermined* period of time until closed. Further, it is Applicants who determined that assigning a thread to each group of sessions so that the assigned thread only handles the events of that group of sessions could provide a benefit in the case of sessions that remain open for an undetermined period of time (e.g., such that the session is long-lived), and therefore the dependent claims 12 (in combination with claim 1) is patentable over the cited art and the Examiner's Official Notice.

With regard to claims 13 and 14, claim 13 recites "A method according to claim 1 in which the terminals comprise mobile terminals", and claim 14 recites "A method according to claim 13 in which the terminals comprise cellular telephones". Even if the statement of "By this rationale, 'Official Notice' that ... cellular telephones and mobile terminals [used as] the terminals is well known and expected in the art" (page 7 of the final Office Action, in a rejection corresponding to claims 13 and 14), claims 13 and 14 are nonetheless patentable. As described above, it is Applicants who determined the unique problems regarding sessions associated with mobile terminals and cellular phones (e.g., long-lived sessions, e.g., that might remain open for an undetermined period of time), and it is

S.N. 10/019,330
Art Unit: 2143

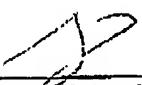
Applicants who therefore determined that assigning a thread to each group of sessions so that the assigned thread only handles the events of that group of sessions (as recited in claim 1) is important. Therefore, claims 13 and 14 are, in combination with the subject matter of independent claim 1, patentable over the combination of the cited art and the Examiner's Official Notice.

With regard to claim 17, this claim recites "in which the sessions are part of the Wireless Session Protocol (WSP)". Even if the statement "By this rationale, 'Official Notice' is taken that ... using the WSP protocol for sessions is well known and expected in the art" (page 8 of the final Office Action, in a rejection corresponding to claim 17), dependent claim 17 is patentable. As described above, it is Applicants who determined problems regarding sessions using the WSP protocol (e.g., long-lived sessions, e.g., that might remain open for an undetermined period of time), and it is Applicants who therefore determined that assigning a thread to each group of sessions so that the assigned thread only handles the events of that group of sessions (as recited in claim 1) is important. Therefore, claim 17 is, in combination with the subject matter of independent claim 1, patentable over the combination of the cited art and the Examiner's Official Notice.

Based on the foregoing arguments, it should be apparent that claims 1-22 are thus allowable over the reference(s) cited by the Examiner, and the Examiner is respectfully requested to reconsider and remove the rejections. The Examiner is invited to call the undersigned attorney for any remaining issues.

S.N. 10/019,330
Art Unit: 2143

Respectfully submitted:



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10/27/06

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CERTIFICATION OF FACSIMILE TRANSMISSION

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